

1 tgttccccctt ttctcttccc aactttctcc ggcggcaatc cccctgcaaa gagacgatct
 61 tgacaccatt gttttaggca taatagaagt tctacaaaca acgcccgaag gacacacagg
 121 caggcaccca ctaccatggg gaaaacagtc gttgtggcca gtaggatgtt ctggtaatg
 181 tttttcgtgc cgtttcttct tgcgactgc cccagcgagc ccgctacgc ctggcacccc
 241 ggatcgagcc gaggtagct gtttaagcgt aagaattcga cgggtgccgtt tgaagacaa
 301 gccggcaaa tcaccgagcg ggttgccac tcgtccgcc tccccccct tgttaatgtg
 361 gacggggtga tggttgccat cgcggacgct cgctacgaca catccaatga caactccctc
 421 attgatacgg tggcgaagta cagcgtggac gatggggaga cgtgggagac ccaaatggcc
 481 atcaagaaca gccgtgtatc gctgtttct cgtgtggtg atccaccgt gattgtgaag
 541 ggcaacaagc ttacgtcct ggttggaagc tactatagtt cgagaagcta ctggtcgtcg
 601 catggtgatg cgagagactg ggatatctg cttgccgttg gtgaggtcac gaagtccact
 661 gcgggcggca agataactgc gagtatcaaa tgggggagcc ccgtgtcact gaagaagttt
 721 tttccggcag aaatggaagg catgcacaca aatcaatttc ttggcggcg ggtgtgtgcc
 781 attgtagcgt ccaacgggaa tcttgtgtac cctgtgcagg ttacgaacaa aaagaagcaa
 841 gttttctcca agatcttcta ctcggaagat gatggcaaga cgtggaagt ttggaaaggt
 901 aggagcatt ttggctgctc tgaacctgtg gcccttgagt gggaggggaa gctcatcata
 961 aacacccgag ttgactggaa acgccgtctg gtgtacgagt ccagtgcacat ggagaaacccg
 1021 tgggtggagg ctgtcggaac cgtctcgcgt gtgtggggcc cctcaccaaa atcgaaaccag
 1081 cccggcagtc agagcagctt cactgccgtg accatcgaa gaaatgcgtgt gatgctcttc
 1141 acacacccgc tgaattttaa gggaaaggtg ctgcgcgacc gactgaacct ctggctgacg
 1201 gataaccagc gcatttataa cgttgggcaa gtatccattg gtgatgaaaa ttccgcctac
 1261 agctccgtcc tgtacaagga tgataagctg tactgtttgc atgagatcaa cacggacgag
 1321 gtgtacagcc ttgtttttgc acgctgggtt ggcgagctac ggatcattaa atcagtgtg
 1381 cggtccttga agaattggga cagccacctg tccagcattt gcacccctgc tgatccagcc
 1441 gcttcgtcgt cagagagtgg ttgtgttccc gctgtacca cggttggctt tgttggcttt
 1501 ttgtccggca acgctccca aaacgtatgg gaggatgcgt accgctgcgt caacgcaagc
 1561 acggcaaatg cggagaggggt tcggaacggt ttgaagtgtg cgggggttgg cggagggagcg
 1621 ctttggccgg tgagccagca ggggcagaat cagcgtatc gttttgcaaa ccacgcgttc
 1681 acgctggtgg cgtcgggtgac gattcacgag gctccgaggg ccgcgagtc cttgtgggt
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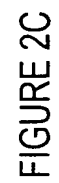
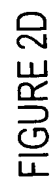
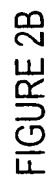
FIGURE 1A

1801 cagtggcagc caatatacgg atcaacgccg gtgacgccga cgggacgtg ggagacgggt
1861 aaaagggtacc acttggttct tacgatggcg aataaaattg gtcctgtga cattgatgga
1921 gaacttctgg aggttctcagg acagaccgtt gtgccagacg ggaggacgcc tgacatctcc
1981 cacttctacg ttggcgggta taaaaggagt gatatgcca ccataagcca cgtgacgggtg
2041 aataatgttc ttctttacaa ccgacagctg aataccgagg agatcaggac cttgttcttg
2101 agccaggacc ttattggcac ggaagcacac atg

FIGURE 1B

1 MGKTVVVASR MFWLMFFVPL LLAICPSEPA YALAPGSSRV ELFKRKNSTV PFEDKAGKVT
61 ERVVSFRLP ALVNVGVMV AIADARYDTS NDNSLIDTVA KYSVDDGETW ETQIAIKNSR
121 VSSVSRVVDV TVIVKGNKLY VLVGSYYSSR SYWSSHGDAR DWDILLAVGE VTKSTAGGKI
181 TASIKWGSPV SLKKFFPAEM EGMHTNQFLG GAGVAIVASN GNLVYPVQVT NKKKQVFSKI
241 FYSEDDGKTW KFGKGRSDFG CSEPVALEWE GKLIINTRVD WKRRLVYESS DMEKPWVEAV
301 GTVSRVWGPS PKSNQPGSQS SFTAVTIEGM RVMLFTHPLN FKGRWLRDRL NLWLTDNQRI
361 YNVGQVSI GD ENSAYSSVLY KDDKLYCLHE INTDEVYSLV FARLVGELRI IKSVLRSWKN
421 WDSHLSSICT PADPAASSSE SGC GPAVTTV GLVGFLSGNA SQNVWEDAYR CVNASTANAE
481 RVRNGLKFAG VGGGALWPVS QQGQNQR YRF ANHAFTLVAS VTIHEAPRAA SPLLGASLDS
541 SGGKLLGLS YDEKHQWQPI YGSTPVTPTG SWETGKRYHL VLT MANKIGS VYIDGELLE G
601 SGQTVVPDGR TPDISHFYVG GYKRSDMPTI SHVTVNNVLL YNRQLNTEEI RTLFLSQDLI
661 GTEAHM

Figure 1C



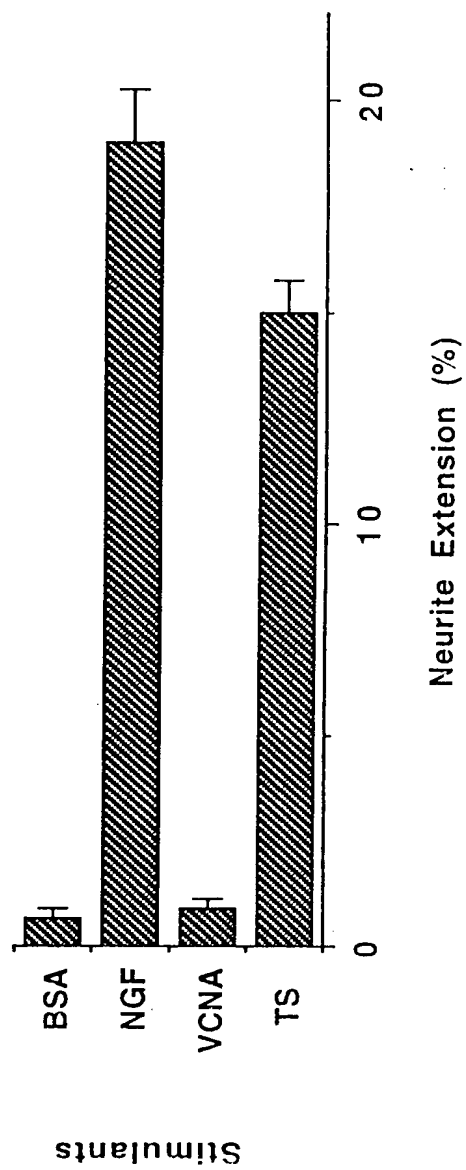


FIGURE 2E

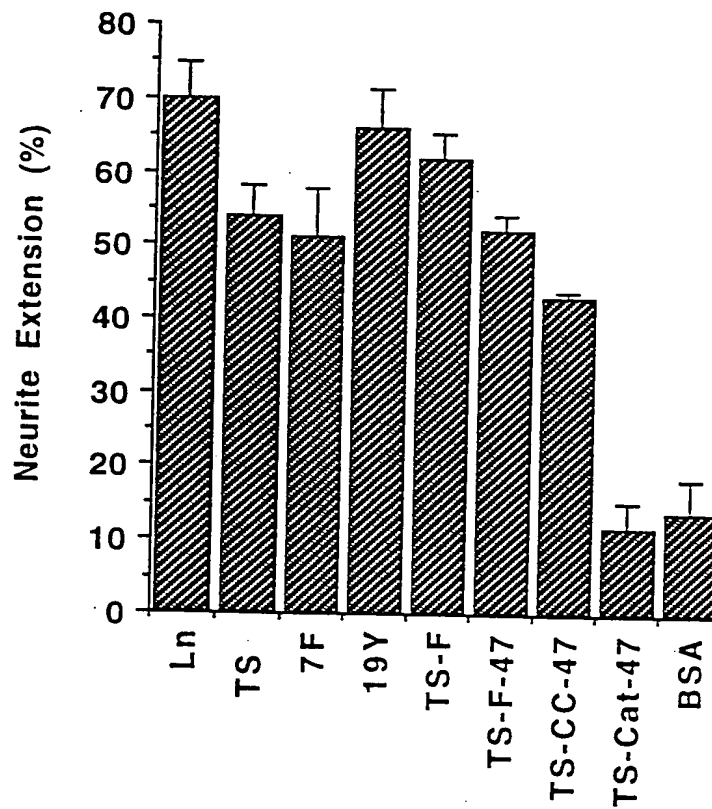


FIGURE 3A

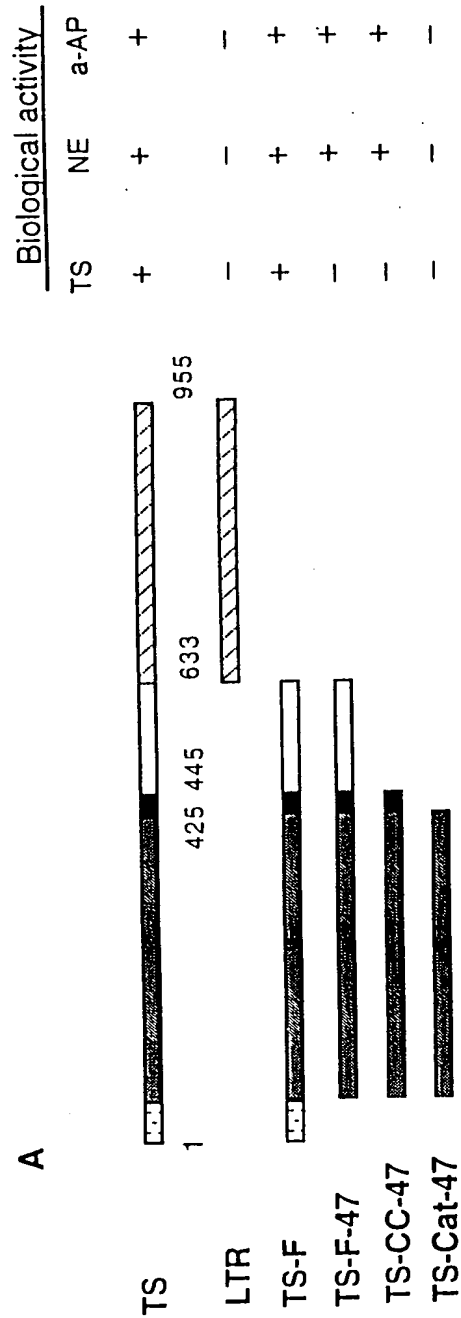


FIGURE 3B

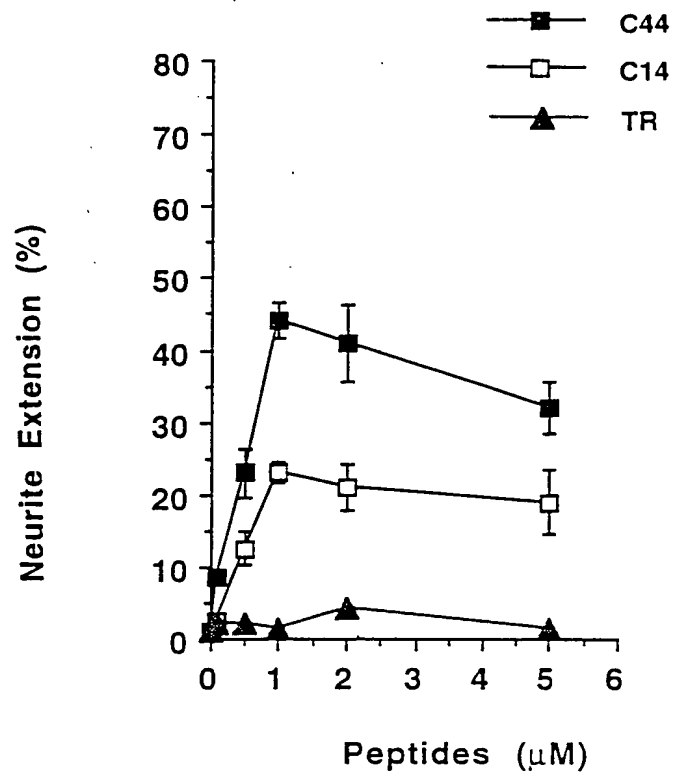
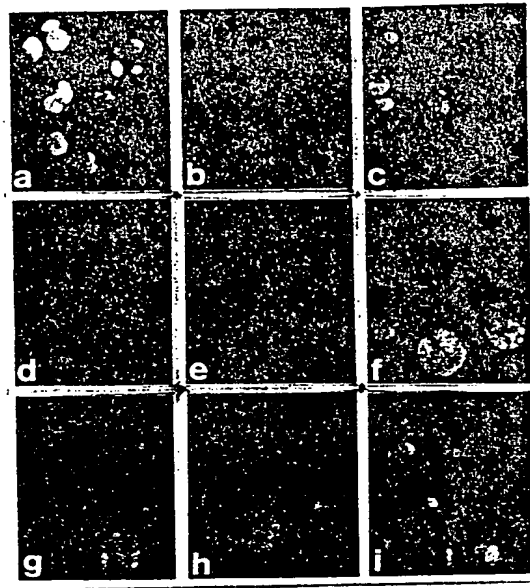
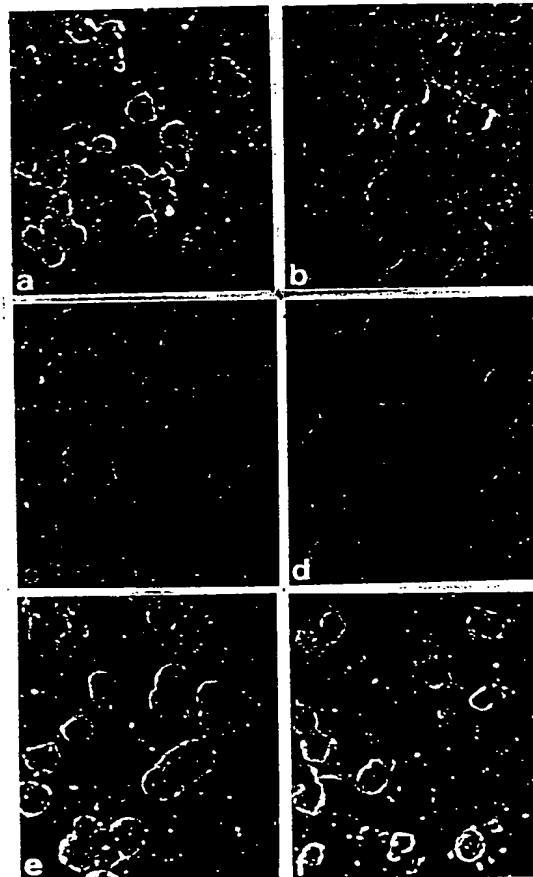


FIGURE 3C



A



B

FIGURES 4A - 4B

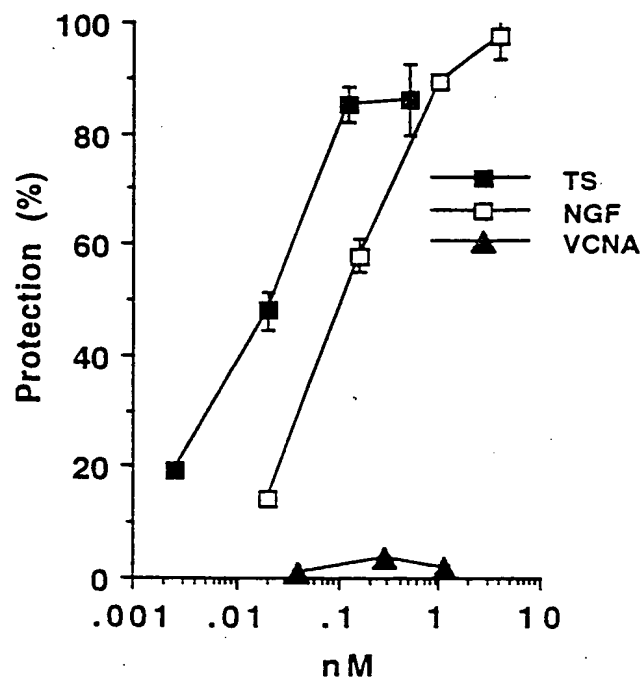


FIGURE 5A

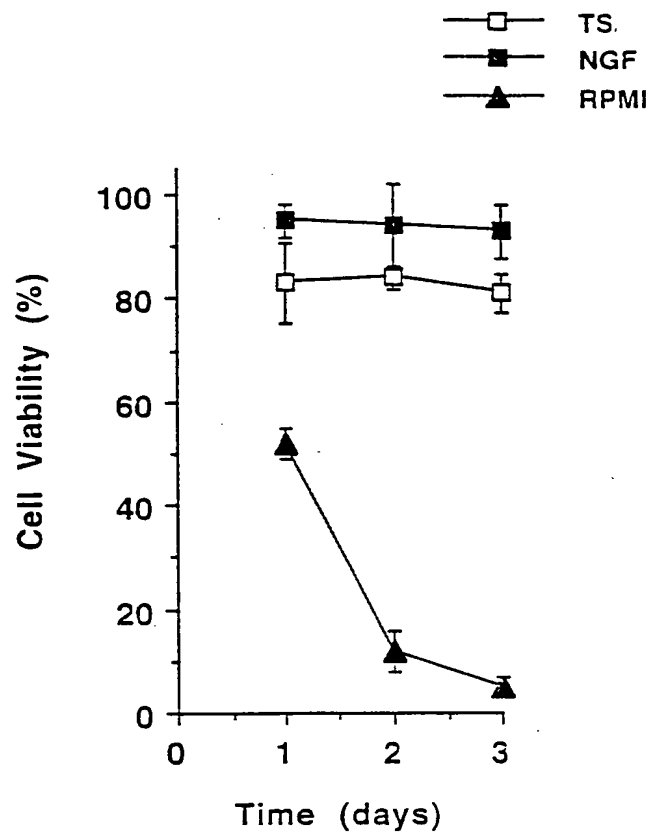


FIGURE 5B

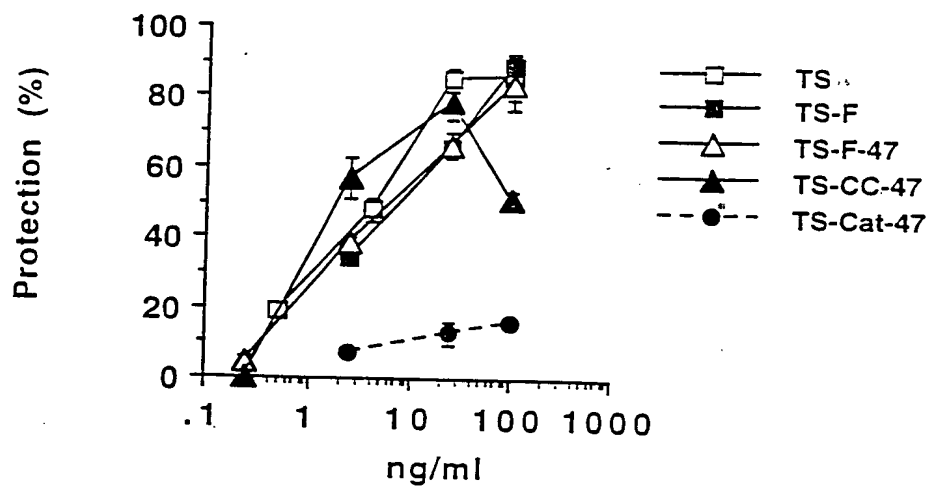


FIGURE 6A

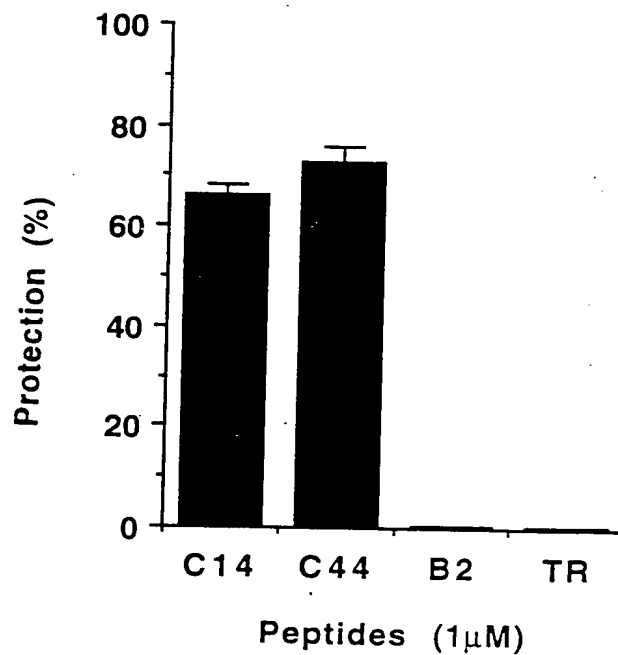


FIGURE 6B

base pairs

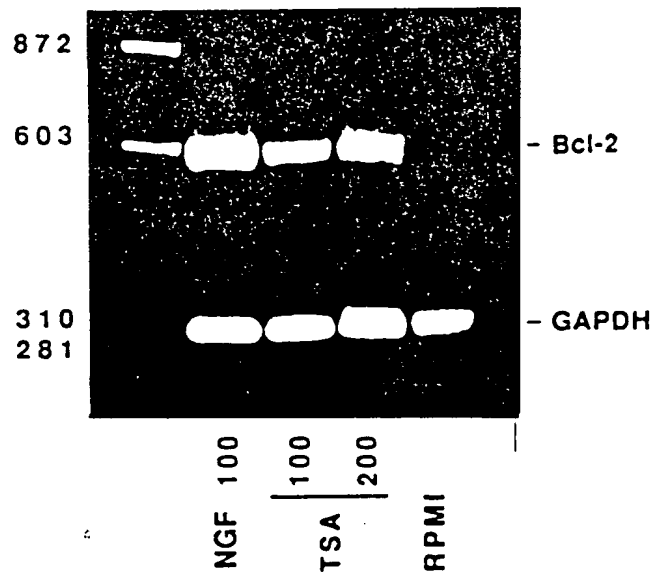


FIGURE 7

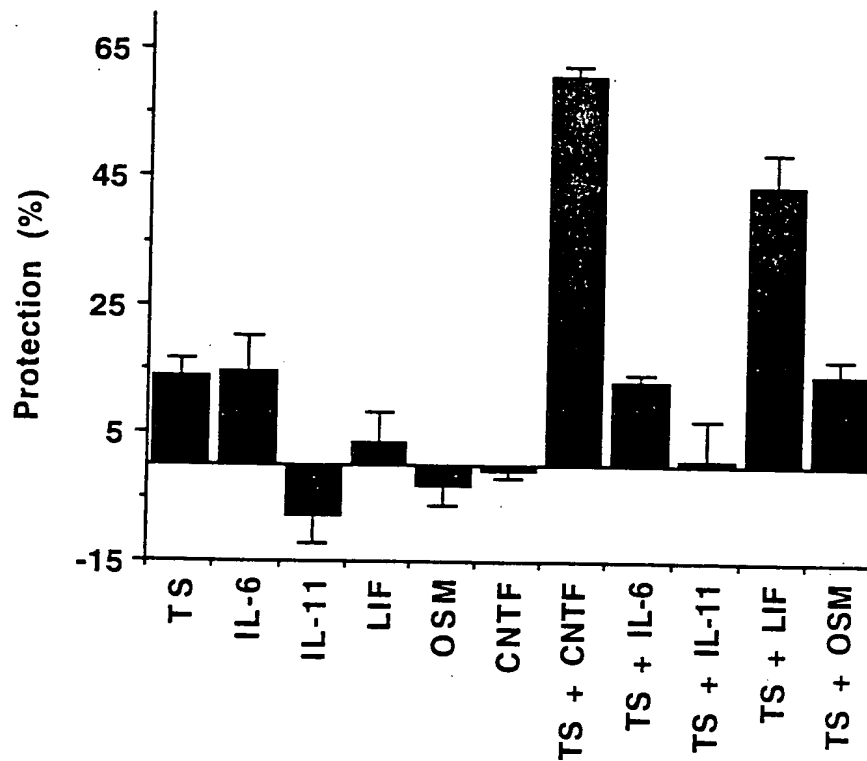


FIGURE 8A

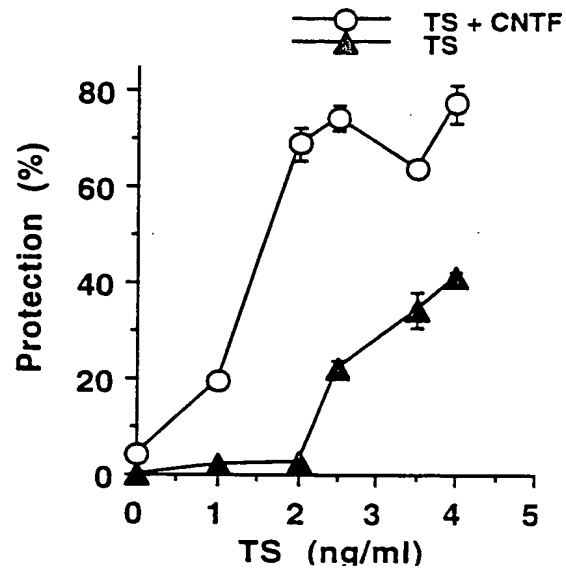


FIGURE 8B

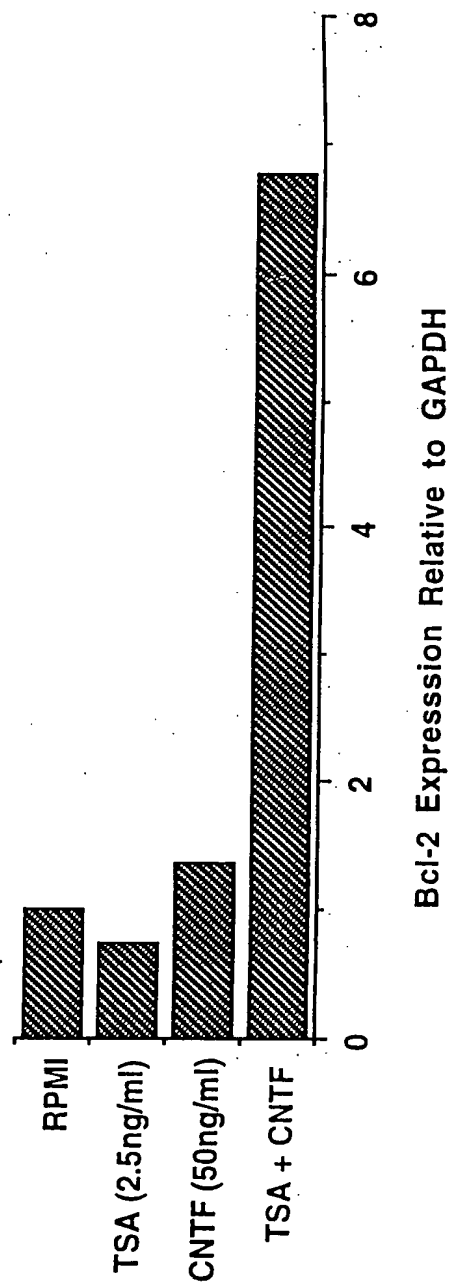


FIGURE 8C

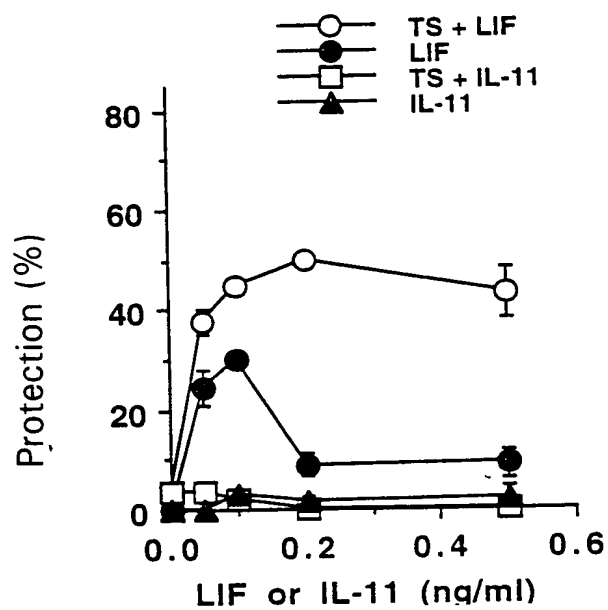


FIGURE 8D

**TS protects human Schwann cells from
serum withdrawal-induced apoptosis**

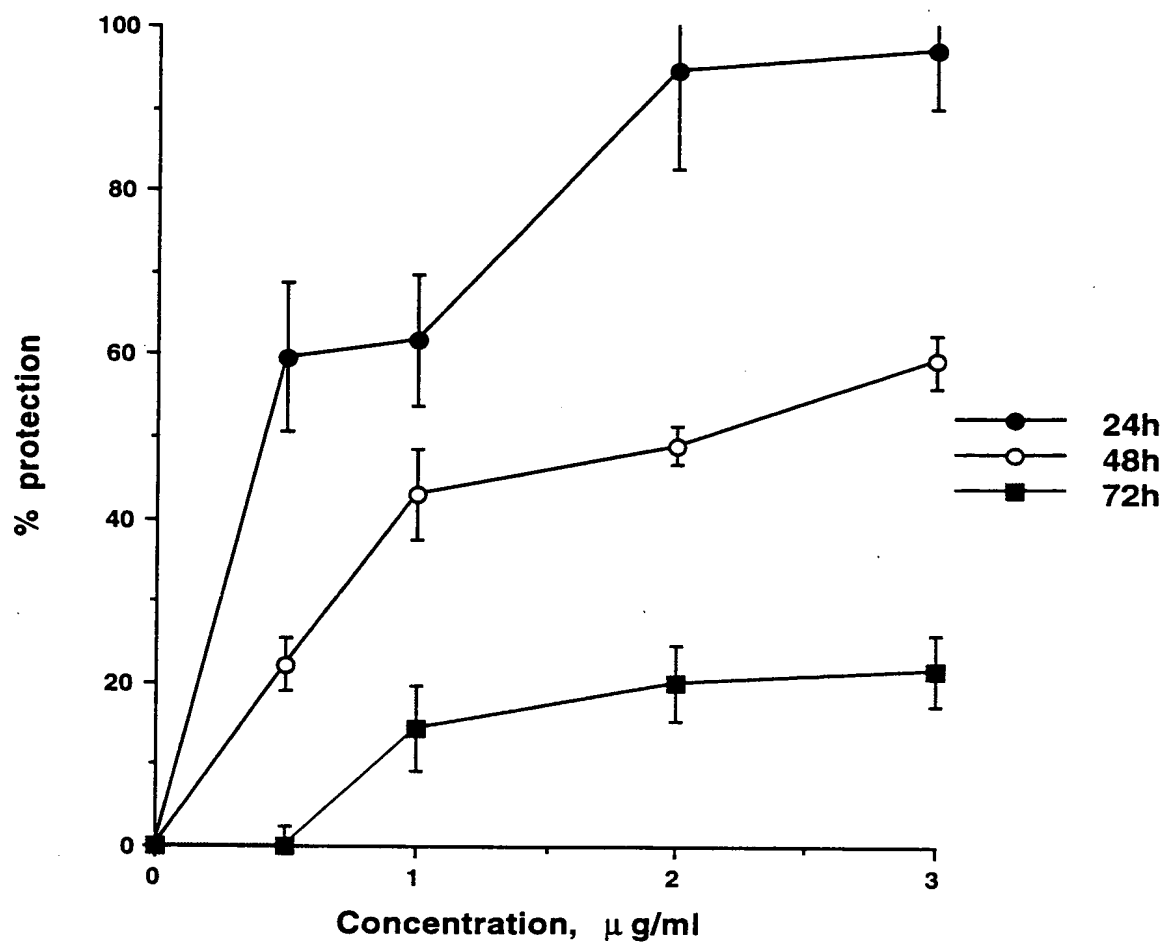
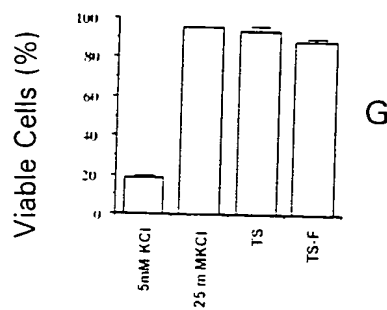
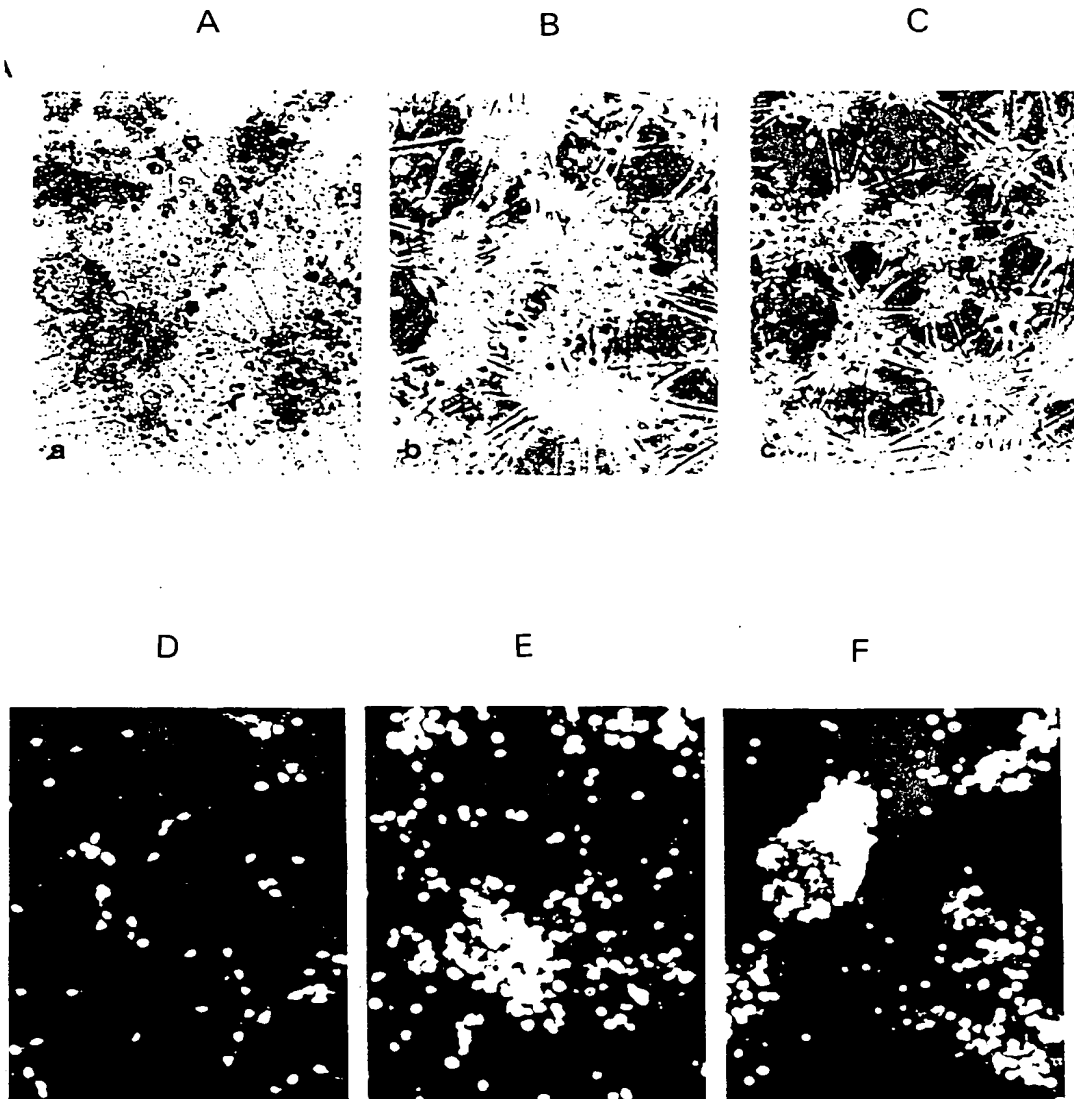
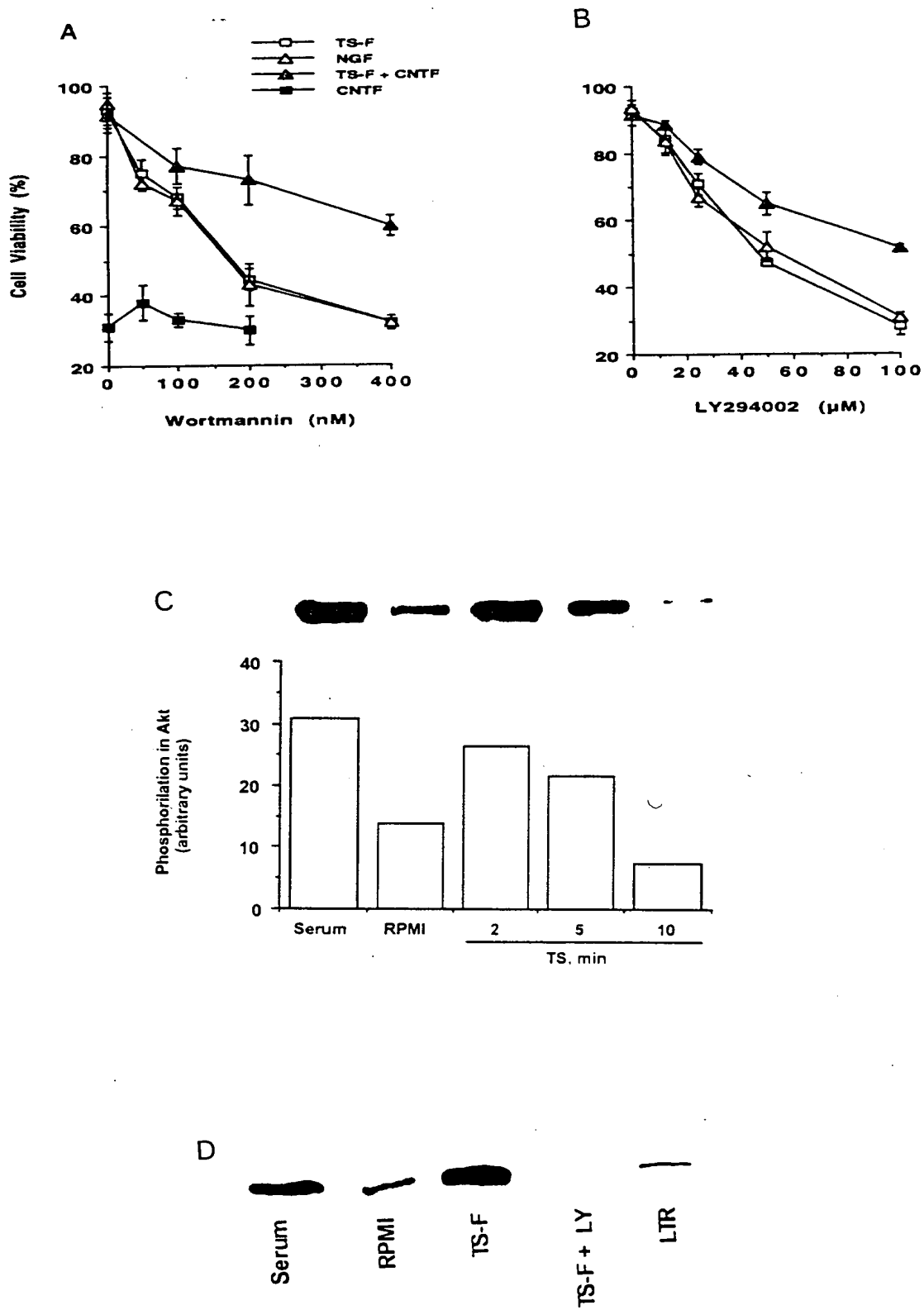


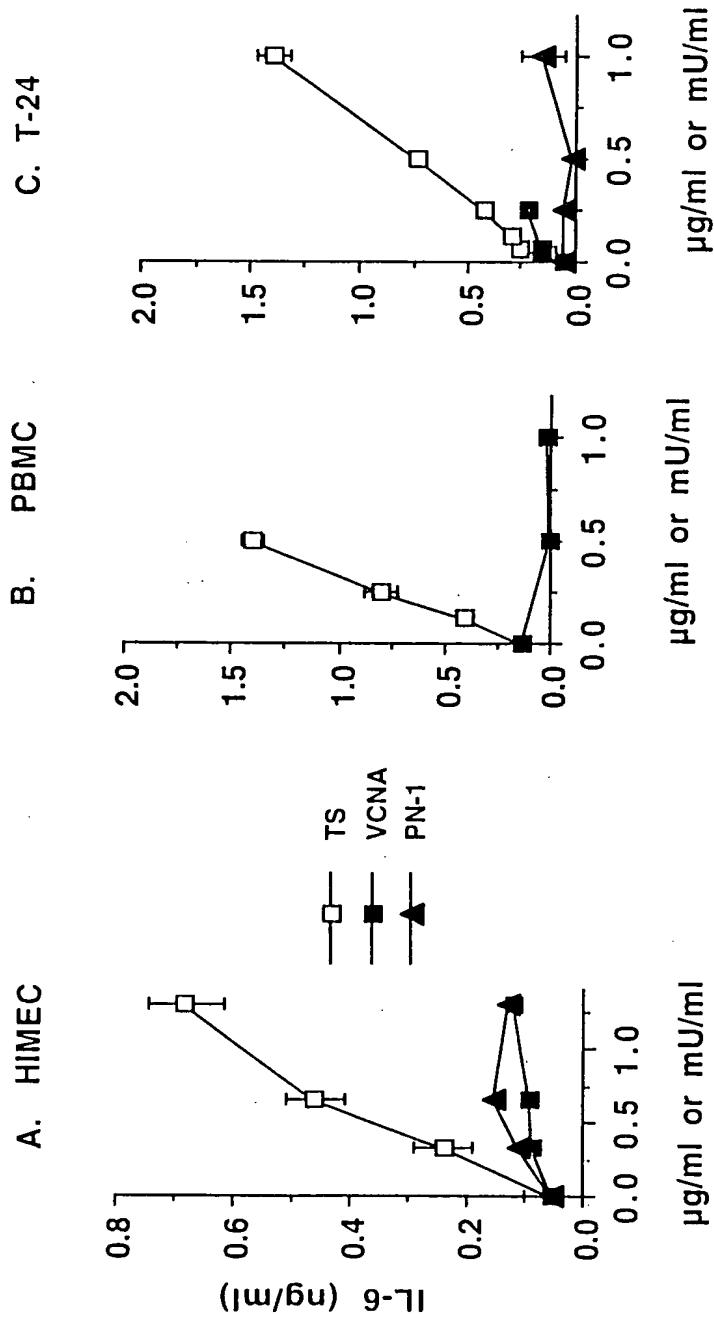
FIGURE 9



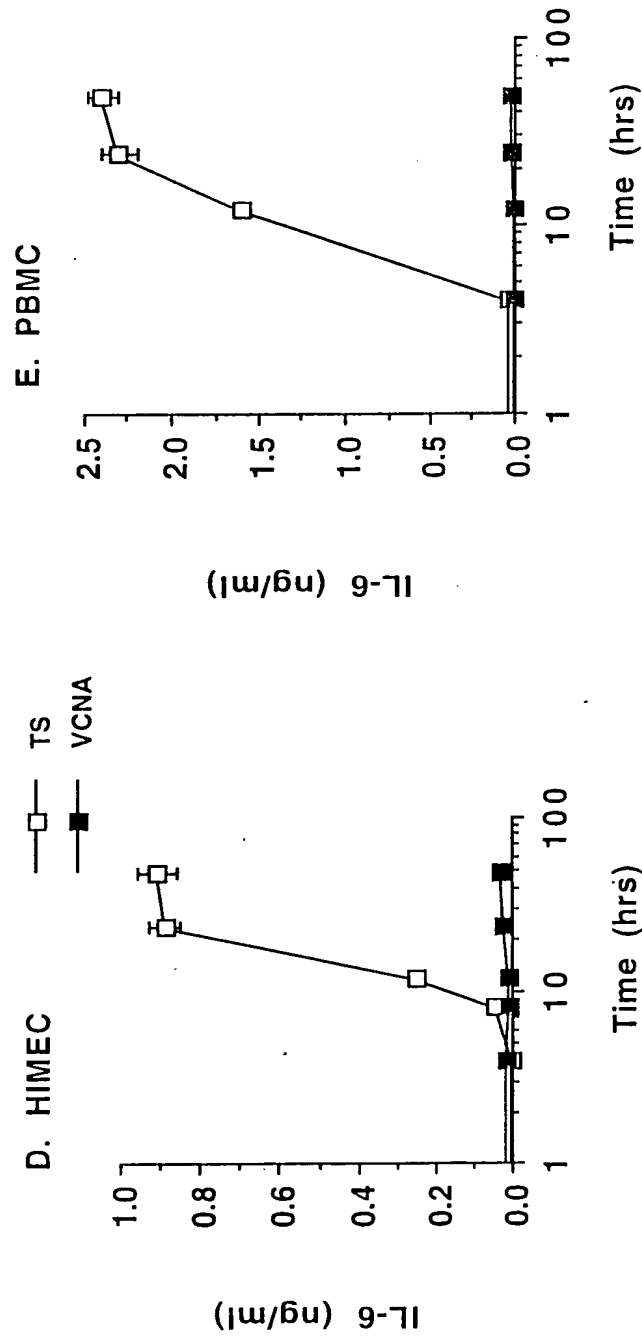
FIGURES 10A - 10G



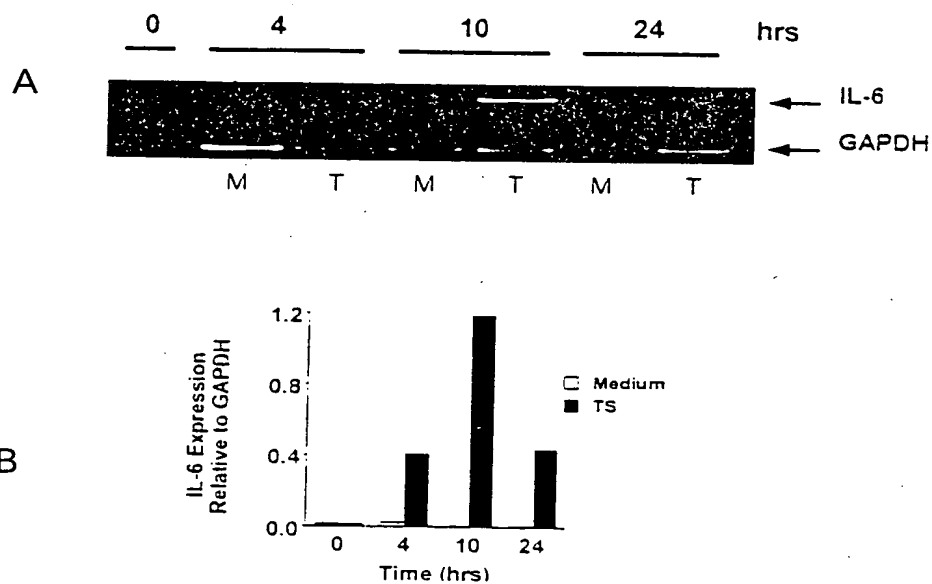
FIGURES 11A - 11D



FIGURES 12A - 12C



FIGURES 12D - 12E



FIGURES 13A - 13B

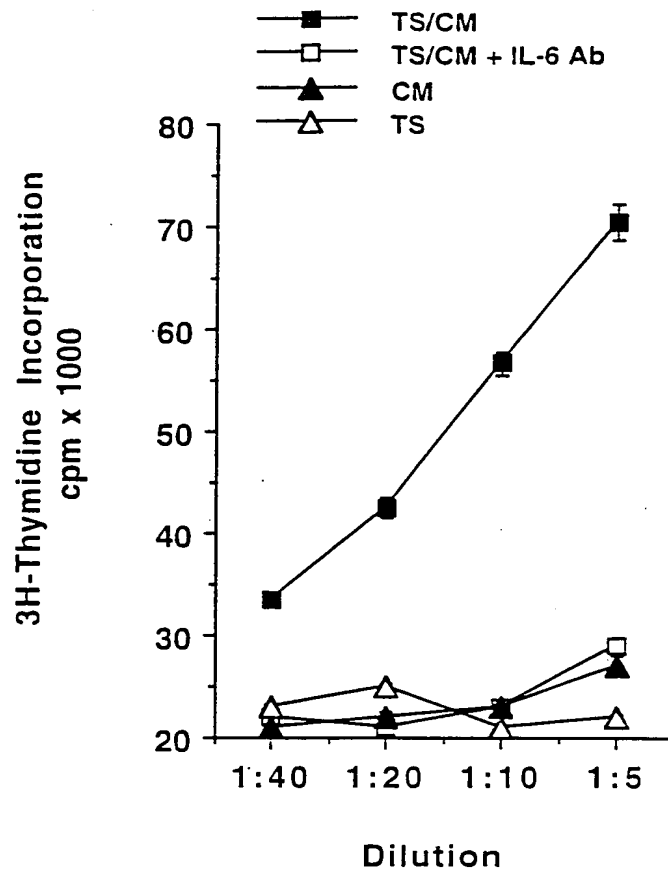
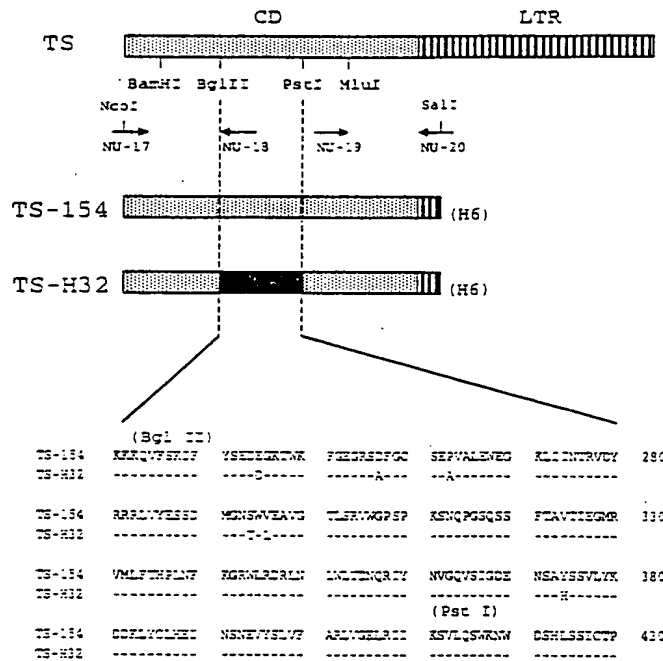
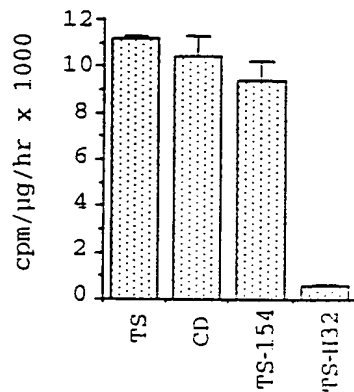


FIGURE 14

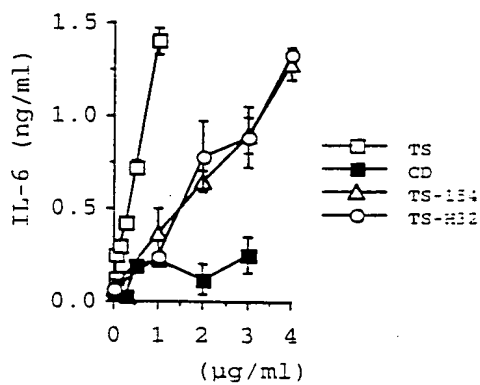
A Schematic diagram



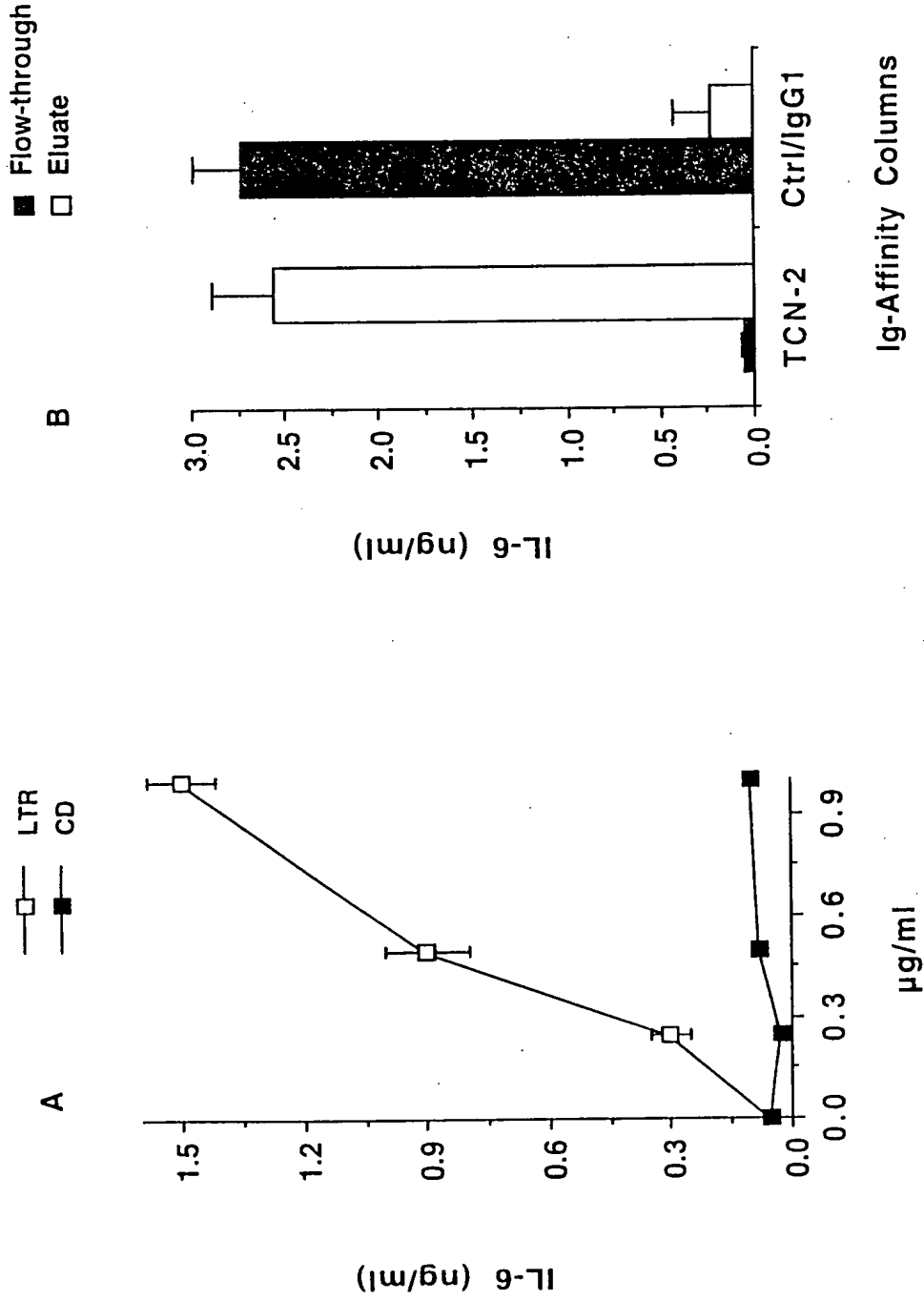
B Catalytic Activity



C IL-6 secretion



FIGURES 15A - 15C



FIGURES 16A - 16B

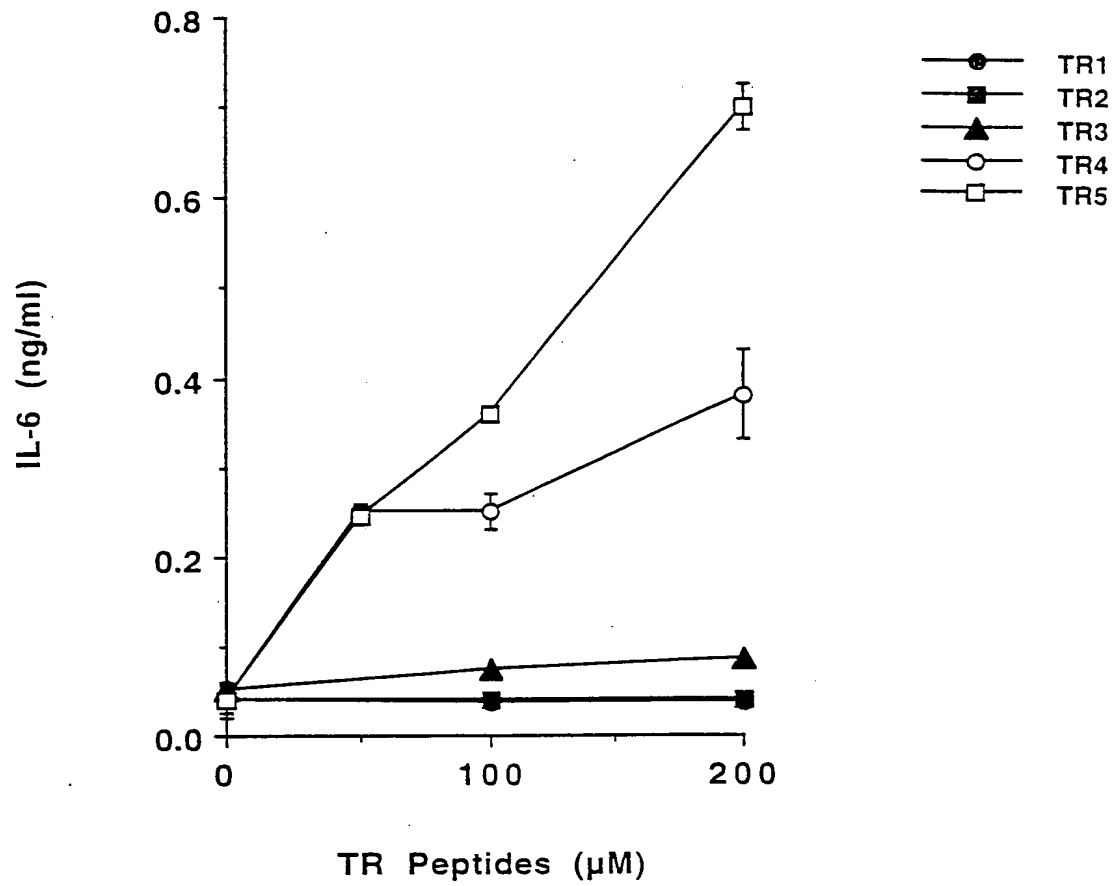
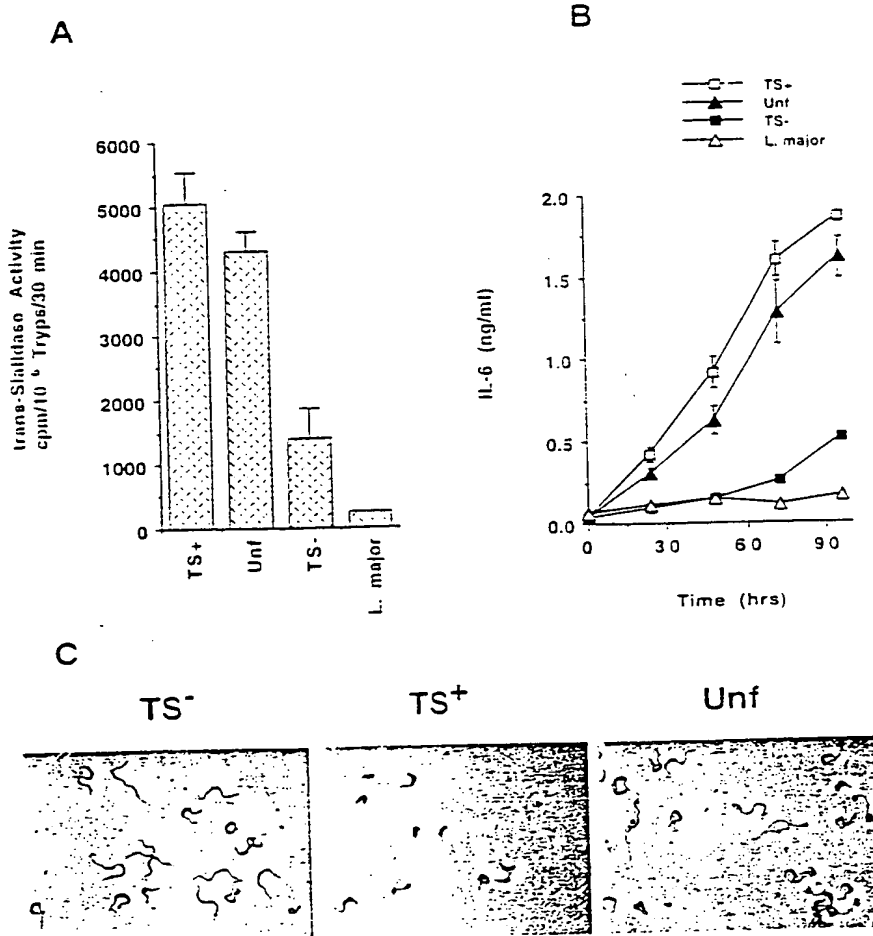


FIGURE 17



FIGURES 18A - 18C

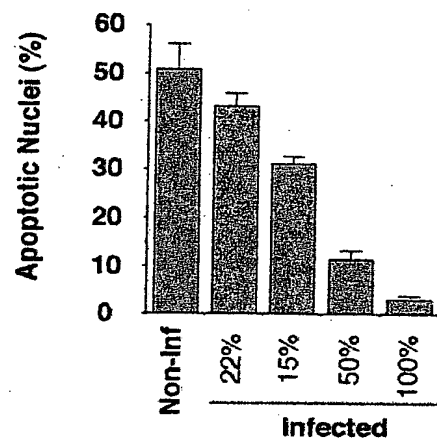
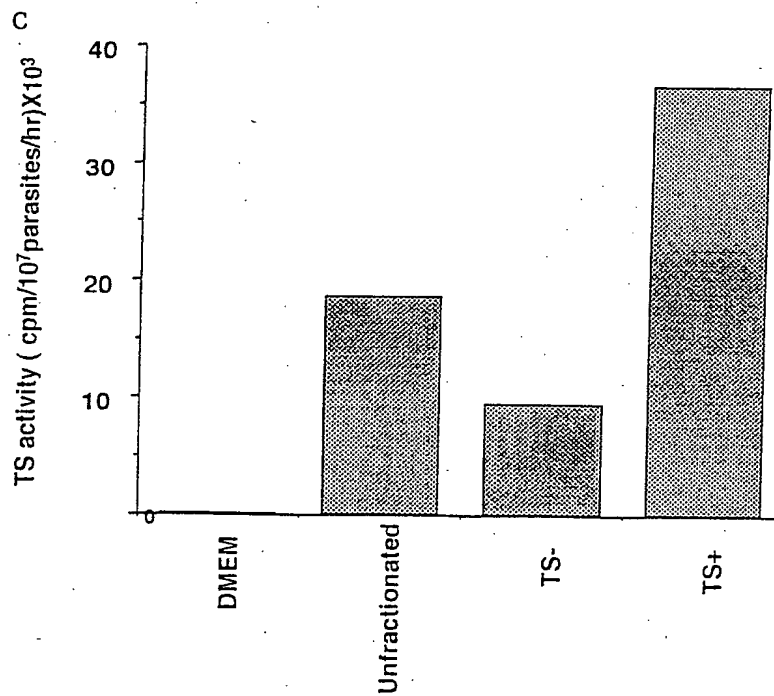
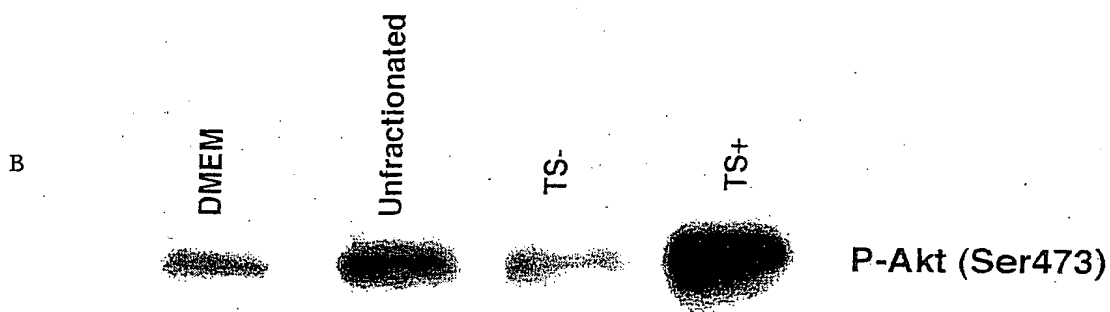
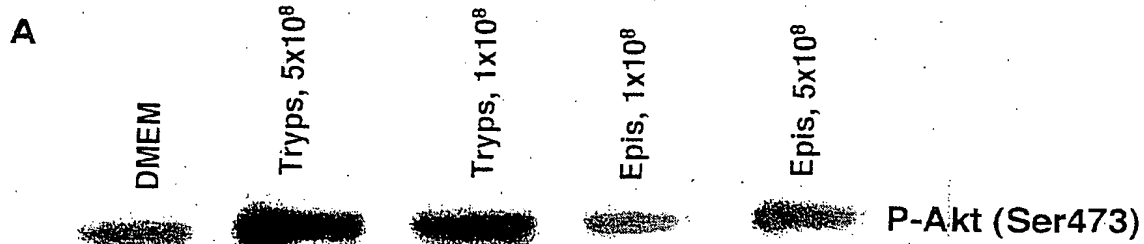
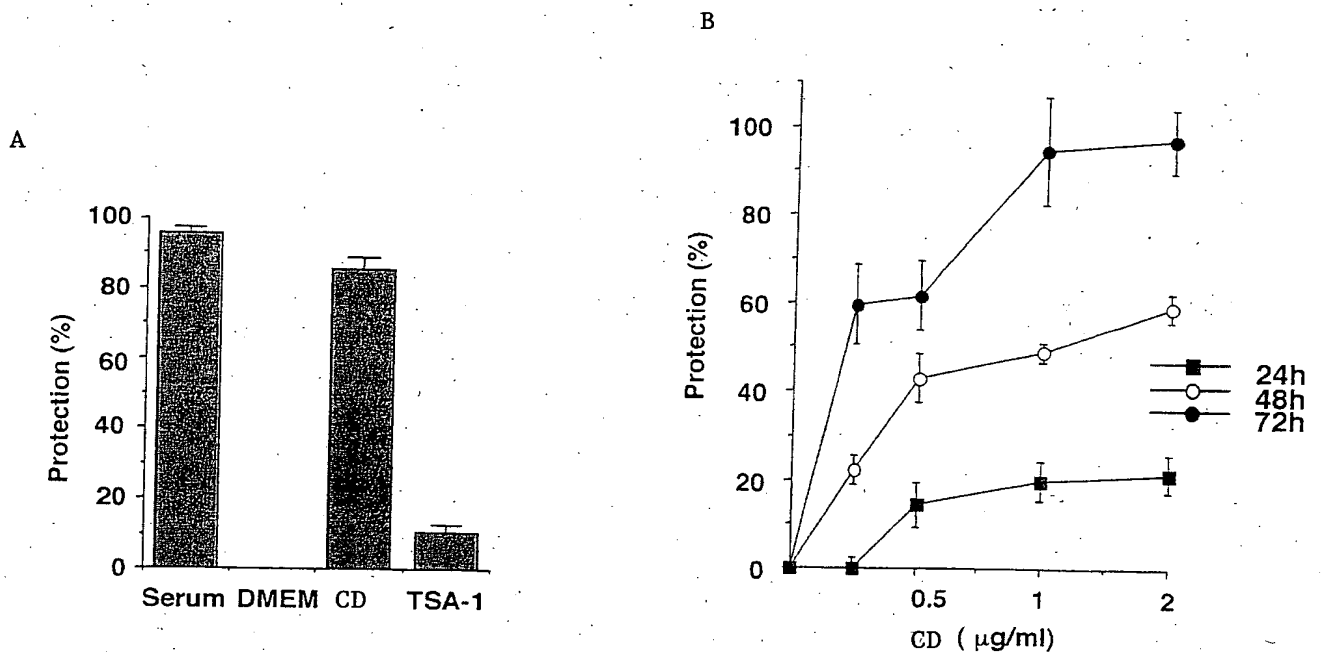


Figure 19

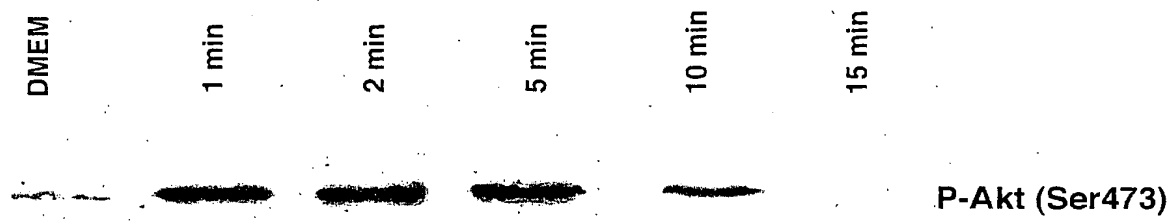


Figures 20A-20C

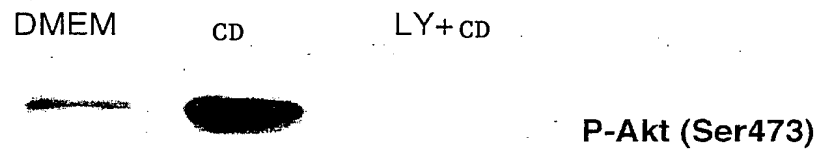


Figures 21A and 21B

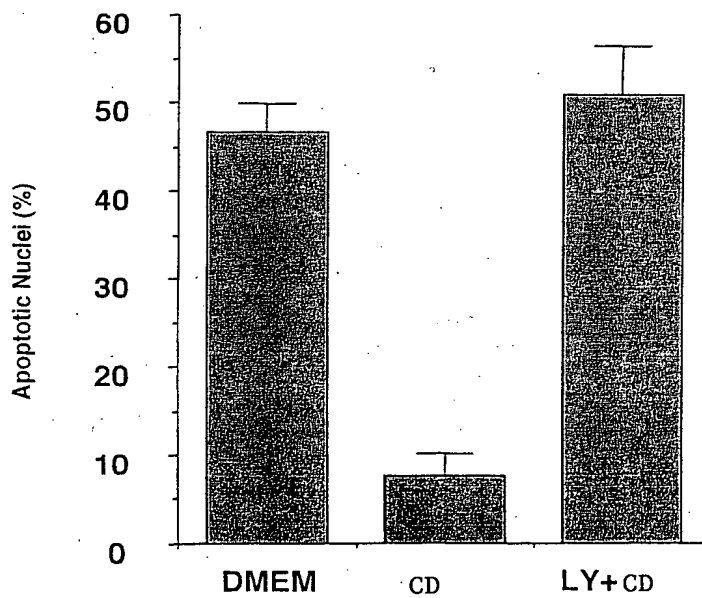
A



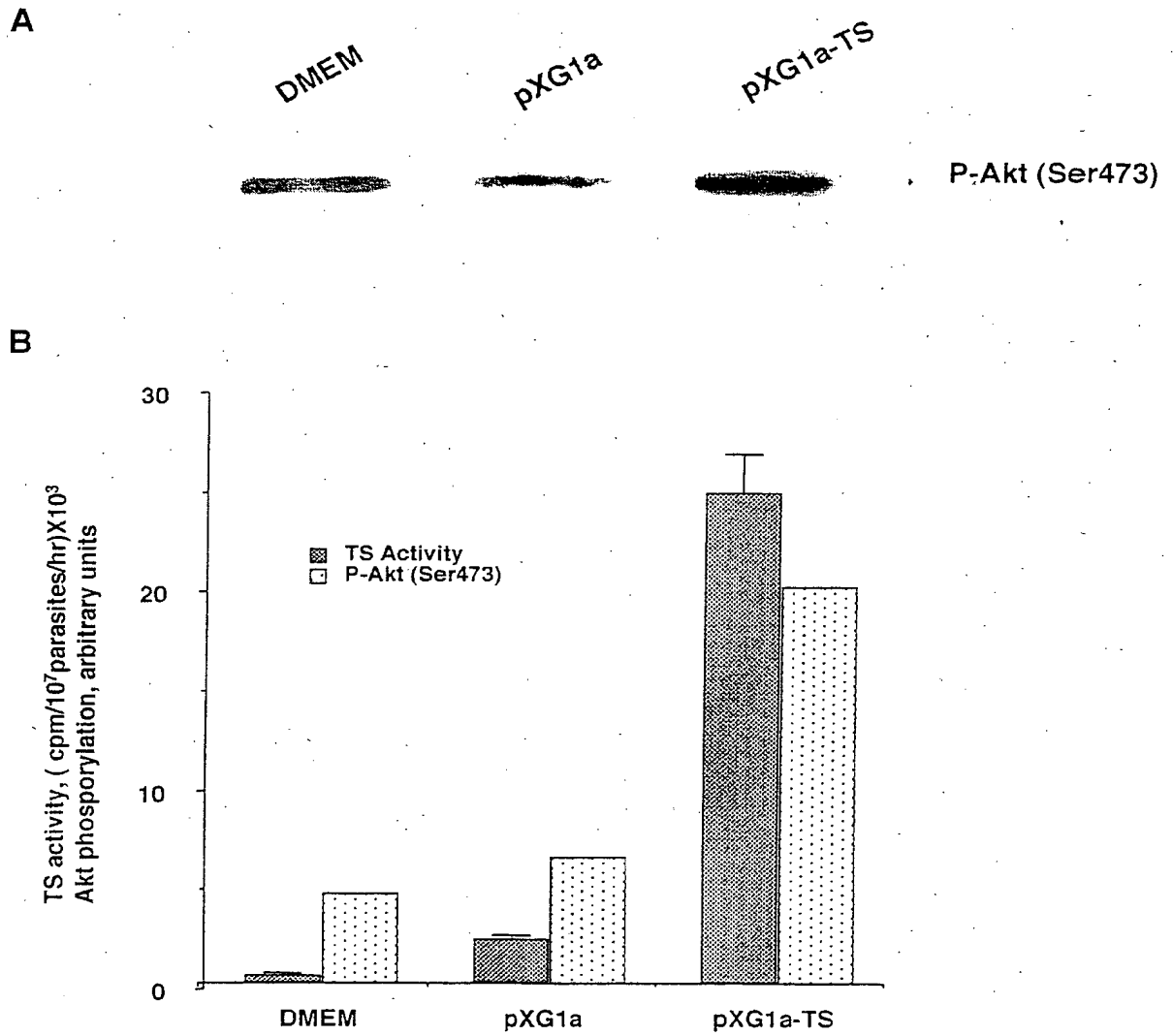
B



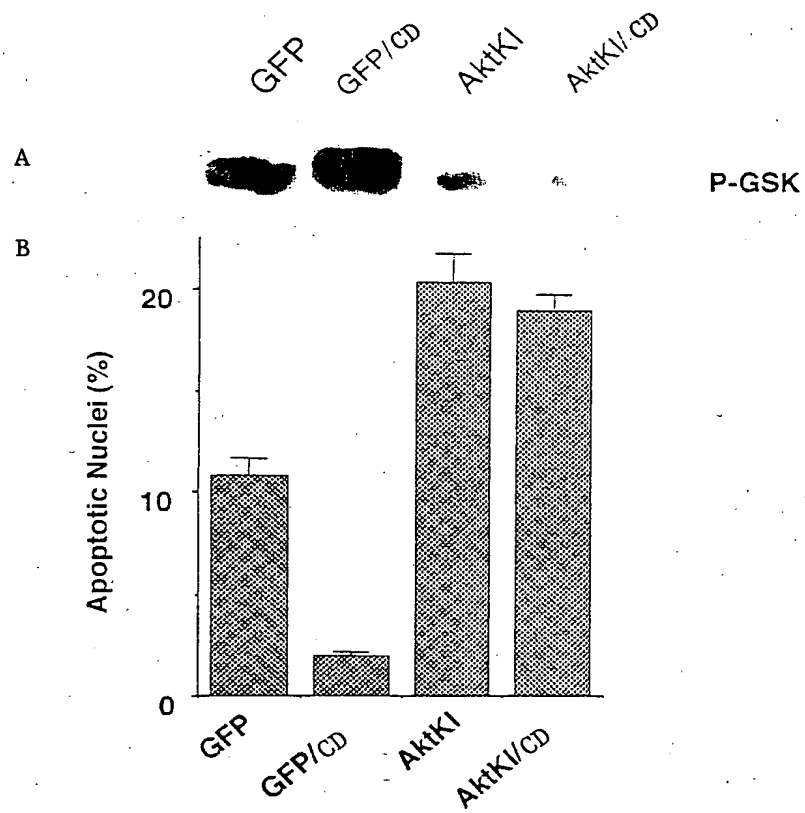
C



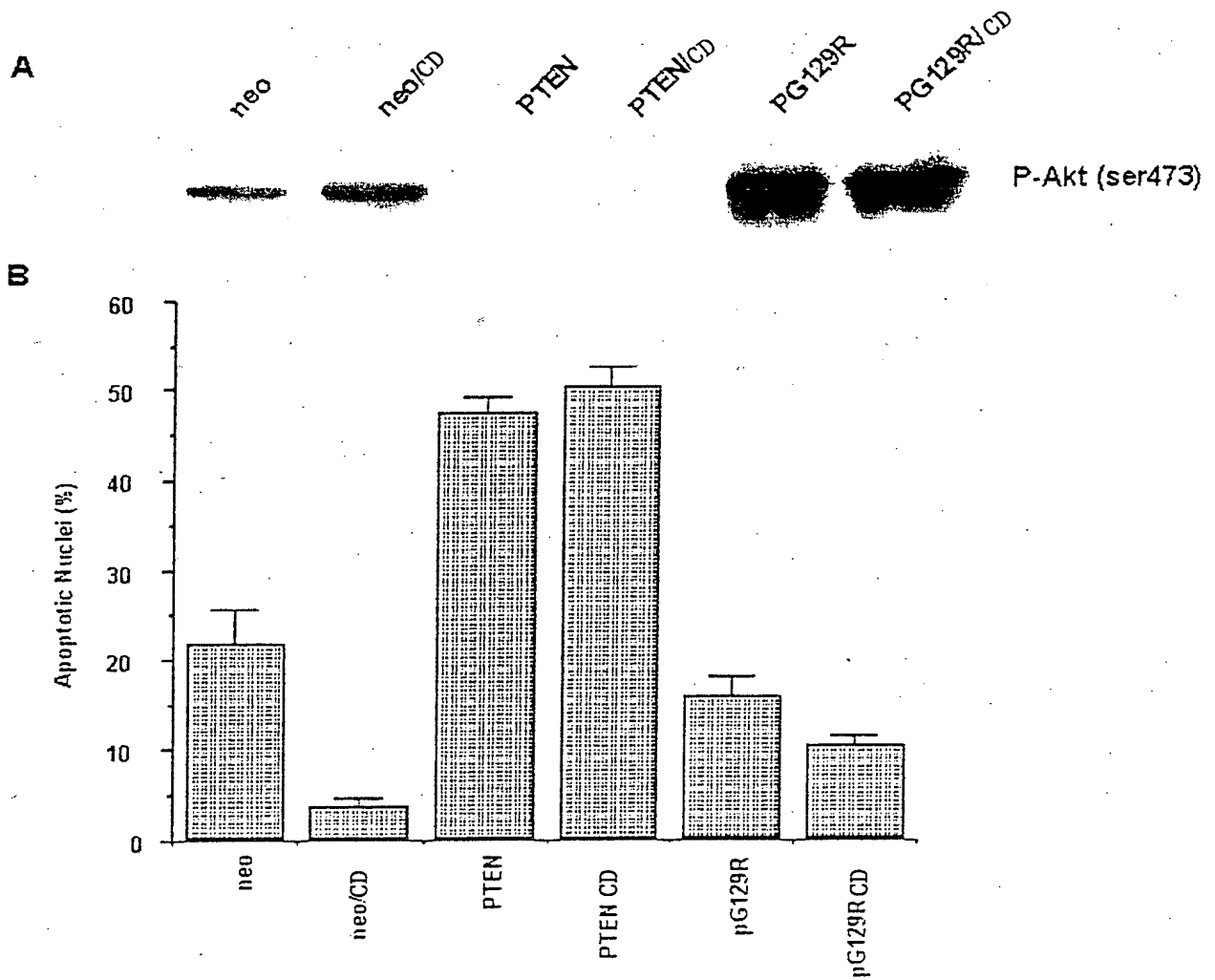
Figures 22A-22C



Figures 23A and 23B



Figures 24A and 24B



Figures 25A and 25B

1 AAAGACCGTT GGAAGAAGAA AGAAGGTTCC GGAGCGTGCC CACCACCAAC GATGAACTGC
61 CACAATTGCG TGCTGTCCGC GGGCGGTACC CGGCGCTTGG AGCCCCACGGC GACTTGTGTG
121 TTCCCCTTTC TCTTCCCACT TTCTCCGCGG CAATCCCCCT GCAAAGAGAC GATCTTGACA
181 CCATTGTTTT AGGCATAATA GAAGTTCTAC AAACAACGCC CGAAGGACAC ACAGGCAGGC
241 ACCGACTACG ATGGGGAAAA CAGTCGTTGT GGCCAGTAGG ATGTTCTGGC TAATGTTTTT
301 CGTGCCGCTT CTTCTTGCGA TCTGCCCCAG CGAGCCCCGG TACGCCCTGG CACCCGGATC
361 GAGCCGAGTT GAGGGTTTAA GCGTAAGAAT TCGACGGTGC CGTTTGAAGA CAAGGCCGGC
421 AAAGTCACCG AGCGGGTTGT CCACTCGTTC CGCTTCCCCG CCCTTGTAA TGTGGACGGG
481 GTGATGGTTG CCATCGCGGA CGCTCGCTAC GAAACATCCA GTGAAAACTC CCTCATATGAT
541 ACGGTGGCGA AGTACAGCGT GGACGATGGG GAGACGTGGG AGACCCAAAT TGCCATCAAG
601 AACAGCCGTG TATCGTCTGT TTCTCGTGTG GTGGATCCCA CCGTGATTGT GAAGGGCAAC
661 AAGCTTTACG TCCTGGTTGG AAGCTACTAT AGTTCGAGAA GCTACTGGTC GTCGCATGGT
721 GATGCGAGAG ACTGGGATAT TCTGCTTGCC GTTGGTGAGG TCACGAAGTC CACTGCGGGC
781 GGCAAGATAA CTGCGAGTAT CAAATGGGGG AGCCCCGTGT CACTGAAGAA GTTTTTTCCG
841 GCAGAAATGG AAGGCATGCA CACAAATCAA TTTCTTGGCG GCGCGGGTGT TGCCATTGTA
901 GCGTCCAACG GGAATCTTGT GTACCCTGTG CAGGTTACGA ACAAAGGAA GCAAGTTTTC
961 TCCAAGATCT TCTACTCGGA AGATGATGGC AAGACGTGGA AGTTTGGGAA GGGTAGGAGC
1021 GATTTTGGCT GCTCTGAACC TGTGGCCCTT GAGTGGGAGG GGAAGCTCAT CATAAACACC
1081 CGAGTTGACT GGAAACGCCG TCTGGTGTAC GAGTCCAGTG ACATGGAGAA ACCGTGGGTG
1141 GAGGCTGTCTG GAACCGTCTC CGCTGTGTGG GGCCCTCAC CAAAATCGAA CCAGCCCCGGC
1201 AGTCAGACGA GCTTCACTGC CGTGACCATC GAAGGAATGC GTGTGATGCT CTTACACAC
1261 CCGCTGAATT TTAAGGGAAG GTGCGTGCGC GACCGACTGA ACCTCTGGCT GACGGATAAC
1321 CAGCGCATTT ATAACGTTGG GCAAGTATCC ATTGGTGATG AAAATTCCGC CTACAGCTCC
1381 GTCCTGTACA AGGATGATAA GCTGTACTGT TTGCATGAGA TCAACACGGA CGAGGTGTAC
1441 AGCCTTGTTT TTGCACGCCT GGTGCGGAG CTACGGATCA TTAATCAGT GCTGCGGTCC
1501 TGGAAGAATT GGACAGCCAC CTGTCCAGCA TTTGCACCCC TGCTGATCCA GCCGCTTCGT
1561 CGTCAGAGAG TGGTTGTGGT CCCGCTGTCA CCACGGTTGG TCTTGTGGC TTTTGTCCG
1621 CAACGCCTCC CAAAACGTAT GGGAGGATCG TACCGCTGCG TCAACGCAAG CACGGCAAAT
1681 GCGGAGAGGG TTCGGAACGG TTTGAAGTTT GCGGGGGTTG GCGGAGGAGC GCTTTGGCCG
1741 GTGAGCCAGC AGGGGCAGAA TCAGCGGTAT CGTTTGTCAA ACCACGCGTT CACGCTGGTG
1801 GCGTCGGTGA CGATTACGA GGCTCCGAGG GCGCGGAGTC CCTTGCTGGG TGCGAGCCTG
1861 GACTCTTCTG GCGGCAAAAA ACTCCTGGG CTCTCGTACG ACGAGAAGCA CCAAGGTAC
1921 CCAATATACG GATCAACGCC GGTGACGCCG ACGGGATCGT GGGAGACGGG TAAAAGGTAC
1981 CACTTGGTTC TTACGATGGC GAATAAAATT GGCTCCGTGT ACATTGATGG AGAACTTCTG
2041 GAGGGTTTAC GACAGACCGT TGTGCCAGAC GGGAGGACGC CTGACATCTC CCACTTCTAC
2101 GTTGGCGGGT ATAAAAGGAG TGATATGCCA ACCATAAGCC ACGTGACGGT GAATAATGTT
2161 CTTCTTTACA ACCGACGACA GCTGAATACC GAGGAGATCA GGACCTTGT CTTGAGCCAG
2221 GACCTTATTG GCACGGAAGC ACACATGGAC AGCAGCAGCG ACAGCAGTGC CCACAGTACG
2281 CCCTCAACTC CCGCTGACAG CAGTGCCAC AGTACGCCCT CAACTCCCGT TGACAGCAGT
2341 GCCCACAGTA CGCCCTCGAC TCCCGCTGAC AGCAGTGCCC ACGGTACGCC CTCAACTCCC
2401 GTTGACAGCA GTGCCCACGG TACGCCCTCA ACTCCCGCTG ACAGCAGTGC CCACGGTACG
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2641 CCCTCGACTC CCGCTGACAG CAGTGCCAC AGTACGCCCT CGACTCCCGC TGACAGCAGT
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2761 GTTGACAGCA GTGCCCACGG TACGCCCTCG ACTCCCGCTG ACAGCAGTGC CCACAGTACG
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2881 GCCCACAGTA CGCCCTCGAC TCCCGTTGAC AGCAGTGCCC ACGGTACGCC CTCAACTCCC
2941 GTTGACAGCA GTGCCCACAG TACGCCCTCG ACTCCCGTTG ACAGCAGTGC CCACGGTACG
3001 CCCTCAACTC CCGTTGACAG CAGTGCCAC AGTACGCCCT CGACTCCCGC TGACAGCAGT
3061 GCCCACAGTA CGCCCTCAAC TCCCGCTGAC AGCAGTGCCC ACGGTACGCC CTCAACTCCC
3121 GTTGACAGCA GTGCCCACAG TACGCCCTCG ACTCCCGCTG ACAGCAGTGC CCACAGTACG

Figure 26A

3181 CCCTCAACTC CCGTTGACAG CAGTGCCAC AGTACGCCCT CAACTCCCGC TGACAGCAGT
3241 GCCCACGGTA CGCCCTCAAC TCCCGTTGAC AGCAGTGCCC ACGGTACGCC CTCGACTCCC
3301 GCTGACAGCA GTGCCCACAG TACGCCCTCG ACTCCCGCTG ACAGCAGTGC CCACAGTACG
3361 CCCTCGACTC CCGCTGACAG CAGTGCCAC AGTACGCCCT CAACTCCCGT TGACAGCAGT
3421 GCCCACAGTA CGCCCTCAAC TCCCGCTGAC AGCAGTGCCC ACAGTACGCC CTCAACTCCC
3481 GCTGACAGCA GTGCCCACAG TACGCCCTCG ACTCCCGCTG ACAGCAGTGC CCACAGTACG
3541 CCCTCAACTC CCGTTGACAG CAGTGCCAC AGTACGCCCT CAACTCCCGC TGACAGCAGT
3601 GCCCACGGTA CGCCCTCGAC TCCCGCTGAC AGCAGTGCCC ACAGTACGCC CTCGACTCCC
3661 GTTGACAGCA GTGCCCACAG TACGCCCTCG ACTCCCGCTG ACAGCAGTGC CCACGGTACG
3721 CCCTCGACTC CCGCTGACAG CAGTGCCAC AGTACGCCCT CGACTCCCGC TGACAGCAGT
3781 GCCCACGGTA CGCCCTCGAC TCCCGCTGAC AGCAGTGCCC ACAGTACGCC CTCAACTCCC
3841 GCTGGCAGCA GCGCCAATGG TACGGTTCTG ATTTTGCCCG ATGGCGCTGC ACTTTTCGACC
3901 TTTTCGGGCG GAGGGCTTCT TCTGTGTGCG TGTGCTTTGC TGCTGCACGT GTTTTTTATG
3961 GCAGTTTTCT GATGTAGTGA GAGAGTCTCC TAACAAATGT AGATAAATTC ATAATTGTGG
4021 TGTGAACCGT TTGGGTAAAT GTGTGTGTGC GCTCTCATAA GGAAATGATT TCCAGTAATG
4081 TTTTTTTTTT GTTCTCGAAC ATTTTGAATA AATCTGCAGA CAGATGGGGA CGCGTAATTT
4141 GAATTTGTTT TTCAGCGTTC TTTTGTCACT GGCCCTTGT TTAAGTGGAA CCGCGTTGCA
4201 ATGCGGCGAG GGCATTTCTC TGTTTTGATT TCCTTCTTTT TCTCCTTGT GTTTCTTCAA
4261 TTTGACGGTT TGCACGCTGT GCGGTGGAGC GTTTTCCCTT GTGAAATAAG GGCCAACTGC
4321 TTCACAGTGG CACGAGGGCG CTCAAGAGAT CCGCGGGTGC CCAGTGACTC ACTTTGTGTG
4381 GCGCAGCTCG AGGAGGTGTC TGGCTGCTGT GGGGGCCTCG ATGGTTGCCA CTTGCGGAGT
4441 TTGCAACGAG CGTGCTTCTC CCGGAGGGAG CAGGCGAAAT ATTTTGTTTT TTTTTTTTGT
4501 TTTTTTTGTT TTTTGTGTTT TGTGTGTGTG TGTAAGTTT GGTTCAGTCT CCCTTGAAC
4561 GGGGACGTT GGGCTTAATG GACCAAATC TGATTCCCTT AAAACTTCTT TTGTTGGTTT
4621 TCTTTTGTGTT TTGTTTTTGT GCTGCTGATT TGCACGCTTT CTCAGTGTCA CCGAAGCGCG
4681 GCGGCGGTGT TTGAGTGCCC CCTCACGCTG CTGCTGTGGA ATTTGCGTTG CTTGCGGACA
4741 TTTCTGTTGG GTCGCATTGC TTTCTACTTC GTTTTTTATT TTTGTGTTT GGTGGAGGGG
4801 AGTGTGCAGC AGGGGGCGGG CCGAGATGCC TGTGGAGACA GCGACGTTGC GGGGACTCTC
4861 TCTCGGCCTC GTCATTCAAC AATCCATTGC GCAGCAGTT GCCACGAACA CCAGACCAA
4921 TATTTGTTTCG TTTTCCCACT ATTACCGGCG CGTCTAGCC CACGATGCCA TCTGGGTGCC
4981 GAGGAGGCGG TTGAGCAGCG GAAAAGGCTT CCTGCTATGA AGCGACTGCC ATTGAGAGAA
5041 CTTTTAGCTG CGTGATCTT CCTCAATGCC CAGCCGTTGG CGCGCAGCGG AGGTGCCTGG
5101 GCATTCTAGG AGCAGATGGC GAAAGGTTTC CTGCGCTCA ACTGGCGTGT CTGTGGAGGT
5161 TGGCTATCCT CAGTCGGGAG ACCGCCTCCT GGCACCACAG AACGGGTAGC GGTAGTGTCT
5221 TGGCGAATAG TACAACGCCA CTTGTTGCTG ACTGGGCAGT AAAGCATGTC AGCGGGTCCG
5281 TGTGCCATAC GGGCGCATTC CATGTTCCGT GTGTTGTCCG GTTGCCATGG TCTGCGTCCG
5341 ATGCTGAGCC GCAGGCTCGT CAACATGCAC TCCACAATGT CCGTAAGAAA ACTCCCGGTG
5401 CAC

Figure 26B

1 mvaiaadarye tssenslidl vakysvddge twetqiaikn srvssvsrvv dptvivkgnk
61 lyvlvgysys srsywsshgd ardwdillav gevtkstagg kitasikwgs pvsllkffpa
121 emegmhtnqf lggagvaiva sngnlvypvq vtnkrkqvfs kifyseddgk twkfgkgrsd
181 fgcsepvale wegkliintr vdwkrrlvey ssdmekpwve avgtvsrvwg pspksnqpgs
241 qtsftavtie gmrvmfthp lnfkgrcvrd rlnlwltdnq riynvgqvsi gdensayssv
301 lykddklycl heintdevys lvfarlvgel riiksvlrsw knwtatcpaf aplliqlrr
361 qrvvvvplsp rlvllafrq rlpkrmggsy rcvnastana ervrnglkfa gvgggalwpv
421 sqggqnqrry fanhaftlva svtiheapra aspllgasld ssggkllgl sydekhqwgq
481 iygstpvtp gswetgkryh lvtmankig svyidgelle gsgqtvvpdg rtpdishfyv
541 ggykrsdmpt ishvtvnnvl lynrrqlnte eirtlflsqd ligteahmds ssdssahstp
601 stpadssahs tpstpvds hstpstpads sahgtptpv dssahgtptp padssahgtp
661 stpvdsahs tpstpvds hstpstpads sahgapstpa dssahgtptp pvdssahgtp
721 stpadssahs tpstpadssa hstpstpads sahgtptpv dssahgtptp padssahgtp
781 stpadssahg tpstpvds hstpstpads sahgtptpv dssahgtptp pvdssahgtp
841 stpvdsahs tpstpadssa hstpstpads sahgtptpv dssahgtptp padssahgtp
901 stpvdsahs tpstpadssa hgtptpads sahgtptpv dssahgtptp padssahgtp
961 stpadssahs tpstpvds hstpstpads sahgtptpv dssahgtptp padssahgtp
1021 stpvdsahs tpstpadssa hgtptpads sahgtptpv dssahgtptp padssahgtp
1081 stpadssahs tpstpadssa hgtptpads sahgtptpv dssahgtptp padssahgtp
1141 sggllllcac alllhvfma vf

Figure 26C